

CLAIMS

What is claimed is:

- 1 1. A web page generation method comprising:
2 defining a master specification specifying a common style, a common
3 navigation arrangement, and common content placement for each resultant web
4 page to be generated;
5 defining a first subordinate content specification specifying first content of a
6 first resultant web page, referencing the master specification for style, navigation
7 and content placement;
8 defining a second subordinate content specification specifying second
9 content of a second resultant web page, referencing the master specification for
10 style, navigation and content placement; and
11 generating said first and second resultant web pages with said first and
12 second contents being placed and styled in accordance with said common
13 placement and style specified by said master specification, and said first and second
14 resultant web pages having said common navigation arrangement specified by said
15 master specification.
- 1 2. The method of claim 1, wherein said defining of a master specification
2 specifying a common style comprises specifying a reference to a style definition.
- 1 3. The method of claim 1, wherein said defining of a master specification
2 specifying a common navigation arrangement comprises specifying a reference to a
3 navigation specification.

1 4. The method of claim 1, wherein said defining of a master specification
2 specifying a common content placement comprises specifying said common content
3 placement within said master specification.

1 5. The method of claim 1, wherein each of said defining of a first and a second
2 subordinate content specification specifying first and second content of a first and a
3 second resultant web page is made using a markup language having language
4 elements for specifying control information in a control section, and said referencing
5 of the master specification comprises specifying a reference to said master
6 specification in said control section.

1 6. A web page generation method comprising:
2 receiving a master specification defining a common design for resultant web
3 pages to be generated, specifying common content placement and at least one of
4 common style and common navigation arrangement for each of said resultant web
5 pages to be generated;
6 receiving a first subordinate web page specification defining first content for a
7 first resultant web page to be generated, specifying said first content for said first
8 resultant web page to be generated, and referencing the master specification, for
9 content placement and at least one of style and navigation;
10 receiving a second subordinate web page specification defining second
11 content for a second resultant web page to be generated, specifying said second
12 content for said second resultant web page to be generated, and referencing the
13 master specification for content placement and at least one of style and navigation;
14 and

15 generating said first and second resultant web pages with said first and
16 second contents being placed, styled and/or having a common navigation
17 arrangement in accordance with said common placement and at least one of style
18 and navigation arrangement specified by said master specification.

1 7. The method of claim 6, wherein said master specification specifies said
2 common style through a specification of a reference to a style definition.

1 8. The method of claim 7, wherein said master specification specifies said
2 common design employing a markup language having language elements for
3 specifying control information in a control section, and said specification of a
4 reference to a style definition comprises specification of said reference to said style
5 definition in said control section.

1 9. The method of claim 6, wherein said master specification specifies said
2 common navigation arrangement through specification of a reference to a navigation
3 specification.

1 10. The method of claim 9, wherein said master specification specifies said
2 common design employing a markup language having language elements for
3 specifying control information in a control section, and said specification of a
4 reference to a navigation definition comprises specifying a reference to a navigation
5 specification in said control section.

1 11. The method of claim 6, wherein said master specification specifies said
2 common design employing a markup language having language elements for

3 specifying content in a content section, and said specification of said common
4 content placement comprises specifying said content placement in said content
5 section.

1 12. The method of claim 6, wherein both of said first and second subordinate web
2 page specifications specify said first and second content of said first and second
3 resultant web pages using a markup language having language elements for
4 specifying control information in a control section, and each of said referencing to
5 the master specification comprises specifying a reference to said master
6 specification in the control section.

1 13. The method of claim 6, wherein
2 said master specification as well as both of said first and second web page
3 specifications express the respective specifications using a markup language having
4 language elements for specifying control information in a control section;
5 said specification of at least one of a common style and a navigation
6 arrangement comprises specifying at least one of a reference to a style definition
7 and a reference to a navigation arrangement in the control section of the master
8 specification;

9 said first and second subordinate web page specifications specify first and
10 second other control information in first and second control sections of the first and
11 second subordinate web page specifications respectively; and

12 each of said generating of said first and second resultant web pages
13 comprises merging said specification of at least one of a reference to a style
14 definition and a reference to a navigation arrangement in the control section of the
15 master specification and the corresponding one of said first and second other

16 control information in the control section of the corresponding one of said first and
17 second subordinate web page specifications.

1 14. The method of claim 6, wherein

2 said master specification as well as both of said first and second subordinate
3 web page specifications express the respective specifications using a markup
4 language having language elements for specifying control information in a control
5 section;

6 said specification of common content placement comprises specification of a
7 content section whose content is to be included from a referencing subordinate web
8 page specification; and

9 said first and second subordinate web page specifications specify said first
10 and said second content in first and second content sections of said first and second
11 subordinate web page specifications respectively; and

12 each of said generating of said first and second resultant web pages
13 comprises merging a corresponding one of said specified first and second contents
14 in said first and second content sections of said first and second subordinate web
15 page specifications into the content section of the master specification.

1 15. The method of claim 6, wherein

2 said first and second resultant web pages are referenced by first and second
3 identifiers;

4 said method further comprises receiving said first and second identifiers
5 requesting for said first and second resultant web pages; and

6 at least said generations of said first and second resultant web pages are
7 performed responsive to the corresponding receiving of said first and second
8 identifiers.

1 16. An apparatus comprising:

2 storage medium having stored therein programming instructions, when
3 executed, operate the apparatus to

4 receive a master specification defining a common design for resultant web
5 pages to be generated, specifying common content placement and at
6 least one of a common style and a common navigation arrangement
7 for each of said resultant web pages to be generated;

8 receive a first subordinate web page specification defining first content for
9 a first resultant web page to be generated, specifying said first content
10 for said first resultant web page to be generated, and referencing the
11 master specification for content placement and at least one of style
12 and navigation;

13 receive a second subordinate web page specification defining second
14 content for a second resultant web page to be generated, specifying
15 said second content for said second resultant web page to be
16 generated, and referencing the master specification for content
17 placement and at least one of style and navigation; and

18 generate said first and second resultant web pages with said first and
19 second contents being placed, styled and/or having a navigation
20 arrangement in accordance with said common placement and at least
21 one of style and navigation arrangement specified by said master
22 specification; and

23 a processor coupled to the storage medium to execute the programming
24 instructions.

1 17. The apparatus of claim 16, wherein
2 said master specification as well as both of said first and second subordinate
3 web page specifications express the respective specifications using a markup
4 language having language elements for specifying control information in a control
5 section;
6 said specification of at least one of a common style and a navigation
7 arrangement comprises specifying at least one of a reference to a style definition
8 and a reference to a navigation arrangement in the control section of the master
9 specification;
10 said first and second subordinate web page specifications specify first and
11 second other control information in first and second control sections of the first and
12 second subordinate web page specifications respectively; and
13 said programming instructions operate the apparatus to perform each of said
14 generating of said first and second resultant web pages in a manner that includes
15 merging of said specification of at least one of a reference to a style definition and a
16 reference to a navigation arrangement in the control section of the master
17 specification and the corresponding one of said first and second other control
18 information in the control section of the corresponding one of said first and second
19 subordinate web page specifications.

1 18. The apparatus of claim 16, wherein
2 said master specification as well as both of said first and second subordinate
3 web page specifications express the respective specifications using a markup

4 language having language elements for specifying control information in a control
5 section;

6 said specification of common content placement comprises specification of a
7 content section whose content is to be included from a referencing subordinate web
8 page specification; and

9 said first and second subordinate web page specifications specify said first
10 and said second content in first and second content sections of said first and second
11 subordinate web page specifications respectively; and

12 said programming instructions operate the apparatus to perform each of said
13 generating of said first and second resultant web pages in a manner that includes
14 merging a corresponding one of said specified first and second contents in said first
15 and second content sections of said first and second subordinate web page
16 specifications into the content section of the master specification.

1 19. An article of manufacture comprising:

2 a storage medium; and

3 a plurality of programming instructions stored in said storage medium to
4 program an apparatus to enable the apparatus to

5 receive a master specification defining a common design for resultant web
6 pages to be generated, specifying common content placement and at
7 least one of a common style and a common navigation arrangement
8 for each of said resultant web pages to be generated,

9 receive a first subordinate web page specification defining first content for
10 a first resultant web page to be generated, specifying said first content
11 for said first resultant web page to be generated, and referencing the

12 master specification, deferring to the master specification for content
13 placement and at least one of style and navigation,
14 receive a second subordinate web page specification defining second
15 content for a second resultant web page to be generated, specifying
16 said second content for said second resultant web page to be
17 generated, and referencing the master specification, deferring to the
18 master specification for content placement and at least one of style
19 and navigation, and
20 generate said first and second resultant web pages with said first and
21 second contents being placed, styled and/or having a navigation
22 arrangement in accordance with said common placement and at least
23 one of style and navigation arrangement specified by said master
24 specification.

1 20. The article of claim 19, wherein
2 said master specification as well as both of said first and second subordinate
3 web page specifications express the respective specifications using a markup
4 language having language elements for specifying control information in a control
5 section;
6 said specification of at least one of a common style and a navigation
7 arrangement comprises specifying at least one of a reference to a style definition
8 and a reference to a navigation arrangement in the control section of the master
9 specification;
10 said first and second subordinate web page specifications specify first and
11 second other control information in first and second control sections of the first and
12 second subordinate web page specifications respectively; and

13 said programming instructions operate the apparatus to perform each of said
14 generating of said first and second resultant web pages in a manner that includes
15 merging of said specification of at least one of a reference to a style definition and a
16 reference to a navigation arrangement in the control section of the master
17 specification and the corresponding one of said first and second other control
18 information in the control section of the corresponding one of said first and second
19 subordinate web page specifications.

1 21. The article of manufacture of claim 19, wherein

2 said master specification as well as both of said first and second subordinate
3 web page specifications express the respective specifications using a markup
4 language having language elements for specifying control information in a control
5 section;

6 said specification of common content placement comprises specification of a
7 content section whose content is to be included from a referencing subordinate web
8 page specification; and

9 said first and second subordinate web page specifications specify said first
10 and said second content in first and second content sections of said first and second
11 subordinate web page specifications respectively; and

12 said programming instructions operate the apparatus to perform each of said
13 generating of said first and second resultant web pages in a manner that includes
14 merging a corresponding one of said specified first and second contents in said first
15 and second content sections of said first and second subordinate web page
16 specifications into the content section of the master specification.

1 22. A web page generation method comprising:

2 receiving a master specification defining a design for one or more resultant
3 web pages to be generated, specifying in a first control section at least one of style
4 and navigation arrangement, and in a first content section first content placement for
5 each of the one ore more resultant web pages to be generated;

6 receiving a first subordinate web page specification defining first content for a
7 first resultant web page to be generated, referencing in a second control section the
8 master specification for content placement and at least one of style and common
9 navigation, and specifying in a second content section said first content; and

10 generating said first resultant web page, adopting said first control section
11 and first content section of said first specification and merging said specified first
12 content into said first content section, resulting with said first content being placed,
13 styled and/or having a common navigation arrangement in accordance with said
14 common placement and at least one of style and navigation arrangement specified
15 by said master specification.

1 23. The method of claim 22, wherein

2 said first subordinate web page specification further specifying other control
3 information in said second control section; and

4 said generating of said first resultant web page further comprises merging
5 said other control information in said adopted first control section.

1 24. The method of claim 22, wherein

2 said master specification as well as said first subordinate web page
3 specification express the respective specifications using the XHTML having a
4 <head> section for specifying control information;

5 said specification of at least one of a common style and a navigation
6 arrangement comprises specifying at least one of a reference to a style definition
7 and a reference to a navigation arrangement in the <head> section of the design
8 specification; and

9 said generating of said first resultant web page comprises adopting said
10 <head> section of said design specification.

1 25. The method of claim 22, wherein

2 said master specification as well as said first subordinate web page
3 specification express the respective specifications using XHTML having language
4 elements for specifying control information in a control section;

5 said master specification specifies said content placement by specifying
6 within said design specification a <body> section whose content is to be included
7 from a referencing subordinate web page specification; and

8 said first subordinate web page specification specifies said first content by
9 specifying within said first subordinate web page specification a <body> section ;

10 and

11 said generating of said first resultant web page comprises merging the
12 content of the <body> section of the subordinate web page specification into the
13 <body> section of the design specification.

1 26. The method of claim 22, wherein

2 said master specification further specifies in a second content section,
3 second content placement for each of the one ore more resultant web pages to be
4 generated, and said first subordinate web page referencing said first content section
5 of said master specification for said first content placement;

6 said method further comprises receiving a second subordinate web page
7 specification defining second content for said second content placement for said first
8 resultant web page to be generated, referencing in a third control section the second
9 content placement of the master specification for content placement and at least
10 one of style and common navigation, and specifying in a third content section said
11 second content; and

12 said generating of said first resultant web page further comprises merging
13 said specified second content into said second content section, resulting with said
14 second content being placed, styled and/or having a common navigation
15 arrangement in accordance with said common placement and at least one of style
16 and navigation arrangement specified by said master specification.

1 27. The method of claim 22, wherein said first control section of said master
2 specification comprises at least one variable control, and said second control
3 section of said first subordinate web page specification comprises a control value for
4 one of said at least one variable control.

1 28. An apparatus comprising:
2 storage medium having stored therein a plurality of programming instructions,
3 when executed, operate the apparatus to
4 receive a master specification defining a design for one or more resultant
5 web pages to be generated, specifying in a first control section at least
6 one of style and navigation arrangement, and in a first content section
7 content placement for each of the one ore more resultant web pages
8 to be generated,

9 receive a first subordinate web page specification defining first content for
10 a first resultant web page to be generated, referencing in a second
11 control section the master specification, deferring to the master
12 specification for content placement and at least one of style and
13 common navigation, and specifying in a second content section said
14 first content, and
15 generate said first resultant web page, adopting said first control section
16 and first content section of said master specification and merging said
17 specified first content into said first content section, resulting with said
18 first content being placed, styled and/or having a common navigation
19 arrangement in accordance with said common placement and at least
20 one of style and navigation arrangement specified by said master
21 specification; and
22 a processor coupled to the storage medium to execute the programming
23 instructions.

1 29. The apparatus of claim 28, wherein
2 said second specification further specifying other control information in said
3 second control section; and
4 said programming instructions operate the apparatus to effectuate said
5 generating of said first resultant web page, merging said other control information in
6 said adopted first control section.

1 30. The apparatus of claim 28, wherein

2 said master specification as well as said first subordinate web page
3 specification express the respective specifications using the XHTML having a
4 <head> section for specifying control information;
5 said specification of at least one of a common style and a navigation
6 arrangement comprises specifying at least one of a reference to a style definition
7 and a reference to a navigation arrangement in the <head> section of the design
8 specification; and
9 said programming instructions operate the apparatus to effectuate said
10 generating of said first resultant web page, adopting said <head> section of said
11 design specification.

1 31. The apparatus of claim 28, wherein

2 said master specification as well as said first subordinate web page
3 specification express the respective specifications using XHTML having language
4 elements for specifying control information in a control section;

5 said master specification specifies said content placement by specifying
6 within said design specification a <body> section whose content is to be included
7 from a referencing subordinate web page specification; and

8 said first subordinate web page specifies said first content by specifying
9 within said first subordinate web page specification a <body> section ; and

10 said programming instructions operate the apparatus to effectuate said
11 generating of said first resultant web page, merging the content of the <body>
12 section of the subordinate web page specification into the <body> section of the
13 design specification.

1 32. The apparatus of claim 28, wherein

2 said master specification further specifies in a second content section,
3 second content placement for each of the one or more resultant web pages to be
4 generated, and said first subordinate web page referencing said first content section
5 of said master specification for said first content placement;

6 said programming instructions further operate the apparatus
7 to receive a second subordinate web page specification defining second
8 content for said second content placement for said first resultant web
9 page to be generated, referencing in a third control section the second
10 content placement of the master specification for content placement
11 and at least one of style and common navigation, and specifying in a
12 third content section said second content, and

13 merge said specified second content into said second content section,
14 resulting with said second content being placed, styled and/or having a
15 common navigation arrangement in accordance with said common
16 placement and at least one of style and navigation arrangement
17 specified by said master specification.

1 33. The apparatus of claim 28, wherein said first control section of said master
2 specification comprises at least one variable control, and said second control
3 section of said first subordinate web page specification comprises a control value for
4 one of said at least one variable control.